

DECLASSIFIED

From: Miller, Garyg
To: Hayter, Earl J ERDC-RDE-EL-MS
Subject: RE: Dioxin Consultation for the St. Regis Site - CONFIDENTIAL, DO NOT CITE, QUOTE, OR DISTRIBUTE
Date: Wednesday, January 07, 2015 8:19:00 AM

OK - thanks

Gary Miller
EPA Remedial Project Manager
214-665-8318
miller.garyg@epa.gov

-----Original Message-----

From: Hayter, Earl J ERDC-RDE-EL-MS [<mailto:Earl.J.Hayter@erdc.dren.mil>]
Sent: Wednesday, January 07, 2015 7:29 AM
To: Miller, Garyg
Subject: RE: Dioxin Consultation for the St. Regis Site - CONFIDENTIAL, DO NOT CITE, QUOTE, OR DISTRIBUTE

Hi Gary,

I will resume sending you the weekly progress reports this Friday. I had a bunch of use-or-lose AL to burn over the last two weeks.

Earl

> -----Original Message-----

> From: Miller, Garyg [<mailto:Miller.Garyg@epa.gov>]
> Sent: Tuesday, January 06, 2015 5:14 PM
> To: Hayter, Earl J ERDC-RDE-EL-MS; Schroeder, Paul R ERDC-RDE-EL-MS
> Cc: Turner, Philip
> Subject: FW: Dioxin Consultation for the St. Regis Site -
> CONFIDENTIAL, DO NOT CITE, QUOTE, OR DISTRIBUTE

>
> FYI - EPA position on relative bioavailability (RBA) factors.

>
>
> Thanks,

>
>
> Gary Miller

>
> EPA Remedial Project Manager

>
> 214-665-8318

>
> miller.garyg@epa.gov

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>
> From: Berg, Marlene

> Sent: Tuesday, January 06, 2015 1:42 PM

> To: Logan, Mary; Miller, Garyg

> Cc: Patterson, Leslie; Scozzafava, MichaelE

> Subject: Fw: Dioxin Consultation for the St. Regis Site -

> CONFIDENTIAL, DO NOT CITE, QUOTE, OR DISTRIBUTE



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> Mary, I imagine that you have seen this, but I wanted to share this
> with a few folks, before I do so with my dioxin workgroup.
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>
> And, Gary, this is the consultation that I had been talking about on
> the phone.
>
> Let me know if you have any questions and I'd be happy to answer them.
> Please email me initially as I am off-site and have a problem with my
> voicemails.
>
> Marlene
>
> _____
>
> From: Scozzafava, MichaelE
> Sent: Tuesday, January 6, 2015 11:29 AM
> To: Tanaka, Joan; Patterson, Leslie
> Cc: Berg, Marlene; Turner, David; Ammon, Doug; Stalcup, Dana; Cooper,
> DavidE; Burgess, Michele
> Subject: Dioxin Consultation for the St. Regis Site
>
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> Joan and Leslie,
>
> We appreciate consulting with Region 5 on the development of proposed
> dioxin soil cleanup levels at the St. Regis site in Minnesota. Our
> review of the draft September 8, 2014, Feasibility Study (FS) Addendum
> finds the proposed site-specific PRGs are protective for residential
> and commercial/industrial use. We did, however, identify a number of
> concerns with the risk calculations that are discussed below.
>
> Our review of the FS addendum was conducted in light of new dioxin
> information available since the June 2011 proposed plan. New dioxin
> information includes, notably, the 2012 IRIS reference dose (RfD) for
> TCDD and new guidance on developing site-specific relative
> bioavailability
> (RBA) exposure factors for dioxin in soil.
>
> A non-cancer PRG, using the 2012 RfD published in IRIS along with an
> RBA of 1.0, per existing Superfund RBA guidance, equates to 69 ppt for
> residential use and 803 ppt for commercial/industrial use. These PRGs
> reflect an HI of 1 and are within the acceptable cancer risk range of
> 1.9E-05 for residential use and 3.8E-05 for commercial/industrial use
> (per EPA's HEAST cancer slope factor (CSF) for TCDD). See Attachment A
> for hazard indices and cancer risks associated with these calculated PRGs.
>
> Based on an evaluation of the St. Regis 2008 Human Health and
> Ecological Risk Assessment (HHERA), we cannot support the use of the
> site-specific RBA of 0.5, used to develop the proposed PRGs, because
> it does not conform to current EPA guidance. This RBA value was
> derived based on Ruby et al[1], in which a site-specific RBA study was
> conducted using soils from Michigan. Based on Superfund science
> policy[2] that is available today, we would have conducted the risk
> assessment using a default RBA of 1.0. As such, we recommend that

> future site-specific RBAs be developed using information found at the
> Superfund dioxin website
> (<http://epa.gov/superfund/health/contaminants/dioxin/dioxinsoil.html>)
> with support provided by OSRTI and the Technical Review Workgroup
> (TRW) Bioavailability Subcommittee. Existing guidance² at this link
> recommends, in the absence of sufficient site-specific data, the use
> of a default RBA of 1.0 in risk assessments. Site-specific data must
> include, at a minimum, the evaluation of soil samples collected at the
> site. This same guidance applies to the development of site-specific
> PRGs for PAHs, where the St. Regis HHERA also applies a
> non-site-specific RBA value of less than one.
>
> While we cannot support the site-specific RBA of 0.5 in light of
> current policy and guidance, we do support the FS Addendum proposed
> PRGs of 63 ppt and 380 ppt. These PRGs are more stringent than our
> calculation of revised updated PRGs (of 69 ppt and 803 ppt), and
> reflect an HI of 0.49 for residential and an HI of 0.27 for
> commercial/industrial use, and a cancer risk of 1E-05 for residential
> and commercial/industrial use (based on the RfD and HEAST CSF,
> respectively). See Attachment A for hazard indices and cancer risks
> associated with the proposed PRGs. As such, the proposed FS Addendum
> PRGs of 63 ppt and 380 ppt are considered protective for cancer risks and non-cancer effects.
>
> We want to thank you for the opportunity to work together in reaching
> the conclusion that the proposed PRGs for residential and
> commercial/industrial use are protective. We especially appreciate
> Region 5's extensive involvement and responsiveness as we worked
> through this consultation. Please note that our statement completes
> the dioxin consultation for the St. Regis site. If you have any
> questions, please don't hesitate to contact me or Marlene Berg of my staff.
>
> Sincerely,
>
> Mike
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>
> Michael Scozzafava, Chief
>
> Science Policy Branch
>
> OSRTI, OSWER
>
> p: 703-603-8833
>
> cell: 202-407-2555
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> [1]Ruby MV, Fehling KA, Paustenbach DJ, et al. 2002. Oral
> bioaccessibility of dioxins/furans at low concentrations (50-350 ppt
> toxicity equivalent) in soil. Environ Sci Technol 36(22):4905-4911.
>
> 2EPA. Final Report - Bioavailability of Dioxins and Dioxin-Like
> Compounds in Soil. U.S. Environmental Protection Agency, Office of
> Superfund Remediation and Technology Innovation. December 20, 2010.
> Available on- line
> at:[http://epa.gov/superfund/health/contaminants/dioxin/pdfs/Final_diox](http://epa.gov/superfund/health/contaminants/dioxin/pdfs/Final_dioxin_R)
> in_R
> BA_Report_12_20_10.pdf

[illegible]

- > [1]Ruby MV, Fehling KA, Paustenbach DJ, et al. 2002. Oral bioaccessibility of dioxins/furans at low concentrations (50-350 ppt toxicity equivalent) in soil. Environ Sci Technol 36(22):4905-4911.
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- > [2]EPA. Final Report - Bioavailability of Dioxins and Dioxin-Like Compounds in Soil. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. December 20, 2010.
- > Available on-line
- > at: http://epa.gov/superfund/health/contaminants/dioxin/pdfs/Final_dioxin_R
- > BA_Report_12_20_10.pdf